

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

July 1, 2014

David Woolley
Bureau of Reclamation
U.S. Department of the Interior
1243 N. Street, SCC-431
Fresno, CA 93720

Subject: Draft Resource Management Plan and Environmental Impact Statement for Contra Loma Reservoir and Recreation Area, Contra Costa County, California (CEQ# 20140143)

Dear Mr. Woolley:

The U.S. Environmental Protection Agency has reviewed the above-referenced document pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The Contra Loma Resource Management Plan will establish management objectives, guidelines, and actions for the Contra Loma Reservoir and Recreation Area for the next 25 years. EPA supports the development of a comprehensive RMP to guide future management actions. EPA commends the efforts by the Bureau of Reclamation to address key resource management issues such as (1) the increasing demand for use of the trail system, swimming lagoon, and recreational facilities, and (2) protection of the water supply and quality of the reservoir. We support current programs at Contra Loma that the Draft RMP/EIS indicates will continue, including body contact restrictions on reservoir use, litter and waste reduction programs, continued prevention of zebra and quagga mussel infestation, and prohibitions on public use of gasoline-powered engines on the reservoir.

While there are positive management goals proposed in the RMP/EIS, we have rated the Draft EIS as Environmental Concerns – Insufficient Information (EC-2) (see the enclosed “Summary of Rating Definitions”). The rating is due to our concerns regarding potential impacts to air, water and biological resources from proposed recreation enhancements and construction activities. Our enclosed detailed comments identify the need for additional information regarding these resources and provide recommendations to reduce potential impacts. While we recognize the programmatic nature of this Draft RMP/EIS, we recommend the Final RMP/EIS provide more specific information regarding these matters (as well as climate change, grazing, naturally occurring asbestos, renewable energy use, funding, and enforcement) to ensure all relevant issues and effects are considered during development of the RMP/EIS.

We appreciate the opportunity to review this Draft RMP/EIS. When the Final RMP/EIS is released for public review, please send one hard copy and one CD ROM to the address above (mail code: ENF-4-2). If you have questions, please contact me at (415) 972-3521, or Tom Plenys, the lead reviewer for this project. Tom can be reached at (415) 972-3238 or plenys.thomas@epa.gov.

Sincerely,

/s/

Kathleen Martyn Goforth
Manager
Environmental Review Section

Enclosures: EPA's Summary of EPA Rating Definitions
EPA's Detailed Comments

Air Quality

The Draft Resource Management Plan/Environmental Impact Statement does not evaluate whether the direct and indirect emissions from the federal action conform to the applicable State Implementation Plan (SIP) as required by the General Conformity Rule (40 CFR 93.150).

Recommendations:

- Include in the Final RMP/EIS a description of the General Conformity regulatory framework and how it applies to the proposed Resource Management Plan and future project-specific implementation. The Final EIS should demonstrate conformity for all pollutants for which Contra Costa County and the Bay Area Air Quality Management District are in nonattainment or maintenance status.
- If analysis of general conformity to the SIP is more appropriate at the project-specific analysis level, we recommend the Final RMP/EIS include a specific commitment to future project-specific general conformity analysis.
- Update, as necessary, the Final RMP/EIS to reflect the latest state and federal attainment designations for air quality.

Contra Loma Reservoir and the study area are located in nonattainment areas for federal and state ozone and particulate matter standards (p. 3-78). Facility improvements and construction proposed under the two action alternatives (Alternatives 2 and 3) would result in mechanical ground-disturbing activities that could generate dust and create conditions conducive to wind erosion (p. 4-75). Additionally, PM and ozone precursors generated during RMP construction activities could contribute to the existing violations of PM in the Bay Area and could exceed state ambient air quality standards (p. 4-78).

We note the Draft EIS mentions adherence to all BAAQMD control strategies for reducing air pollutants, such as dust control measures, and measures for reducing greenhouse gas emissions recommended in BAAQMD's 2010 Clean Air Plan. The Draft RMP/EIS does not, however, specify the measures that will be required, nor is an analysis provided to support the conclusion that impacts to air quality would be minor for either action alternative. Similarly, the Draft RMP/EIS indicates efforts to reduce tailpipe emissions and diesel exhaust produced by combustion engines would be included in all construction activities at Contra Loma; however, no specifics are provided.

Recommendations:

Specify, in the Final RMP/EIS, the BAAQMD control strategies and mitigation measures that will be required to reduce air quality impacts and greenhouse gas emissions from future actions proposed by this RMP. In addition to meeting all applicable local, state, and federal requirements, we recommend the Final RMP/EIS include an appendix listing all mitigation measures to consider when designing specific construction projects. Possible measures to include, as part of this appendix, are listed below:

Fugitive Dust Source Controls:

- Stabilize heavily used unpaved construction roads with water, non-toxic soil stabilizer or soil weighting agent that will not result in loss of vegetation, or increase other environmental impacts.
- During grading, use water, as necessary, on disturbed areas in construction sites to control visible plumes.
- Vehicle Speed
 - Limit speeds to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.
 - Limit speeds to 10 miles per hour or less on unpaved areas within construction sites on un-stabilized (and unpaved) roads.
 - Post visible speed limit signs at construction site entrances.
- Inspect and wash construction equipment vehicle tires, as necessary, so they are free of dirt before entering paved roadways, if applicable.
- Use sandbags or equivalent effective measures to prevent run-off to roadways in construction areas adjacent to paved roadways. Ensure consistency with the project's Storm Water Pollution Prevention Plan, if such a plan is required for the project.
- Stabilize disturbed soils (after active construction activities are completed) with water, a non-toxic soil stabilizer, soil weighting agent, or other approved soil stabilizing method.
- Cover or treat soil storage piles, as well as disturbed areas that remain inactive for longer than 10 days, with appropriate dust suppressant compounds. Provide vehicles (used to transport solid bulk material on public roadways) with covers.
- Use wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) where soils are disturbed in construction, access and maintenance routes, and materials stock pile areas. Keep related windbreaks in place until the soil is stabilized or permanently covered with vegetation.

Mobile and Stationary Source Controls:

- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal¹ or State Standards.² In general, commit to the best available emissions control technology. Tier 4 engines should be used for project construction equipment to the maximum extent feasible.³
- Where Tier 4 engines are not available, use construction diesel engines with a rating of 50 horsepower (hp) or higher that meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines,⁴ unless such engines are not available.
- Where Tier 3 engine is not available for off-road equipment larger than 100 hp, use a Tier 2 engine, or an engine equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides and diesel particulate matter to no more than Tier 2 levels.

¹ EPA's website for nonroad mobile sources is <http://www.epa.gov/nonroad/>.

² For California, see ARB emissions standards, see: <http://www.arb.ca.gov/msprog/offroad/offroad.htm>.

³ Diesel engines < 25 hp rated power started phasing in Tier 4 Model Years in 2008. Larger Tier 4 diesel engines will be phased in depending on the rated power (e.g., 25 hp - <75 hp: 2013; 75 hp - < 175 hp: 2012-2013; 175 hp - < 750 hp: 2011 - 2013; and ≥ 750 hp 2011- 2015).

⁴ As specified in California Code of Regulations, Title 13, section 2423(b)(1)

- Consider using electric vehicles, natural gas, biodiesel, or other alternative fuels during construction, clean up and maintenance phases to reduce the project's criteria and greenhouse gas emissions.
- Plan construction scheduling to minimize vehicle trips.
- Limit idling of heavy equipment to less than 5 minutes and verify through unscheduled inspections.
- Maintain and tune engines per manufacturer's specifications to perform at California Air Resources Board and/or EPA certification levels; prevent tampering, and conduct unscheduled inspections to ensure these measures are followed.

Administrative controls:

- Develop a construction traffic and parking management plan that maintains traffic flow, and plan construction to minimize vehicle trips.
- Identify any sensitive receptors in the project area, such as children, elderly, and the infirm, and specify the means by which impacts to these populations will be minimized (e.g., locate construction equipment and staging zones away from sensitive receptors and building air intakes).
- Include provisions for monitoring fugitive dust in the fugitive dust control plan and initiate increased mitigation measures to abate any visible dust plumes.

Water Resources

Clean Water Act Permitting and Section 404

Some of the construction activities proposed under the action alternatives may require permitting under the Clean Water Act, including compliance with Section 404. Per the Draft RMP/EIS, 8 acres of fresh emergent wetlands and 2 acres of seasonal wetlands are within the study area (p. 3-36 and 3-40). The descriptions and locations of aquatic, wetland and riparian habitats are based on reconnaissance-level surveys performed in October 2010, which did not include a formal delineation of these features or a determination of the Army Corps of Engineers jurisdictional status (p. 3-35).

The Draft EIS indicates that the jurisdictional boundaries and wetland classifications of the aquatic features at Contra Loma are subject to refinement "if or when" a formal delineation is performed (p. 3-35). We recognize Mitigation Measure – Vegetation 1 states that, if deemed necessary by Reclamation, the local managing partner(s) proposing a construction activity will perform a delineation of wetland and riparian vegetation and describe all areas classified as Waters of the U.S. (p. 4-54).

Recommendations:

- Include in the Final RMP/EIS, as part of Mitigation Measure Vegetation-1, the commitment to avoid and minimize impacts to Waters of the US to the maximum extent practicable per the Clean Water Act Section 404(b)(1) Guidelines.
- Clarify, in the Final RMP/EIS, whether Reclamation intends to pursue compensatory mitigation, as referenced in Mitigation Measures-Vegetation 1 and 2, at locations on or offsite, and discuss the feasibility of such compensatory mitigation.

- Discuss, in the Final RMP/EIS, what permits under the Clean Water Act would be required for each type of activity proposed under each alternative evaluated in the RMP/EIS.
- Incorporate, in the Final RMP/EIS, a tabular summary of all mitigation measures proposed.

Water Supply and Drawdown Effects

Contra Loma Reservoir is operated and managed by the Contra Costa Water District under contract to Reclamation and is a component of Reclamation's Central Valley Project. Given the importance of the Contra Loma Reservoir as a drinking water source, as well as increasing concerns with water quality and quantity in California due to climate change, drought and other factors, protecting the reservoir's water quality and supply is a key concern to EPA.

The volume of water pumped from the reservoir to irrigate the Contra Loma Regional Park might be increased from 100 acre-feet per year to 150 acre-feet per year under the action alternatives. This water would be purchased from CCWD, if the requested water is available (p. 4-30). This increase in irrigation water of 50 acre-feet would represent a net additional reservoir drawdown of approximately one foot, occurring most likely during the hot months of July and August. The Draft RMP/EIS indicates the additional reservoir drawdown would cause a small decrease in the reservoir's wetted perimeter adjacent to existing wetland vegetation at the reservoir high water mark, resulting in a minor impact to wetland vegetation resources that would not occur under the No Action Alternative (p. 4-51).

Recommendations:

- Quantify, in the Final RMP/EIS, the expected change in reservoir water levels during the course of a year and the reservoir high water mark under Alternatives 2 & 3 as compared to the No Action Alternative. Include estimates of the expected wetland acreages to be impacted for each alternative.
- Discuss, in the Final RMP/EIS, whether Reclamation would expect the growth of vegetation or wetlands in the reservoir perimeter area exposed as a result of the reservoir drawdown (i.e., is there any reason that wetlands could not form around the perimeter of the reservoir after drawdown).
- Include, in the Final RMP/EIS, a discussion of any potential for reductions of water volumes allocated to the Contra Loma Reservoir from the Bay Delta that could occur under the Central Valley Project. Discuss the potential ramifications on municipal water supply and whether reservoir water would still be used for irrigation needs, as proposed, if the allocation decreases.

Water Quality

As discussed in the Draft EIS/RMP, water quality impacts to the reservoir could result from unauthorized human contact, increased volume of animal and human waste, increased boating activities, sediment from trail use, and construction runoff (p. ES-14). We also note that total coliform levels have often exceeded standards, and E. coli and fecal coliform have occasionally exceeded standards (p. 3-34). Approximately 38 percent of the samples collected at the former beach and 59 percent of the samples collected at the dam contained total coliform levels above the standard.

Recommendations:

- Provide quantitative information, in the Final RMP/EIS, on impacts to water quality for each alternative.
- Discuss, in the Final RMP/EIS, potential actions to be included in this RMP to reduce total coliform, E. coli and fecal coliform exceedances.

Grazing

Grazing is currently allowed on the 454 acres of rolling grasslands surrounding the reservoir in accordance with the current grading license (p. 3-2). The Draft EIS/RMP indicates cattle are not allowed near the reservoir in order to protect water quality. We note one small ephemeral stream flows through the southern part of the grazed area into the reservoir, and could transport fecal matter and sediment directly into the reservoir (p. 3-31). While there is a general description of the effects of grazing on riparian habitat (p. 4-50), there does not appear to be an evaluation of potential grazing effects on other resources, such as water quality, nor an analysis of how increases or changes in grazing under various alternatives would alter impacts.

Recommendations:

- Include, in the Final RMP/EIS, additional detailed information on existing cattle grazing in the study area (e.g., on- and off-dates, number of animal units, pasture locations, rotation frequency and methods), and the effects of grazing on existing and future resource conditions. Of specific interest is whether cattle grazing at current and/or proposed levels may have water quality and habitat effects.
- Clarify, in the Final RMP/EIS, whether Management Action 51 would permit grazing livestock on approximately 3 acres of annual grassland immediately adjacent to the reservoir, as depicted in Figure 2-1. Describe potential impacts to water quality in the reservoir that may result.

Climate Change

The Draft RMP/EIS provides little detail about how climate change may affect the study area. The EPA believes that the long duration of this management plan (most likely two or three decades), and the warming anticipated to occur in the study area, as described in the Draft RMP/EIS (p. 3-81), warrants the inclusion of a climate change mitigation and adaptation plan in the Final RMP/EIS.

Recommendations:

- Include in the Final RMP/EIS, a discussion of climate change and its potential effects on the study area, implementation of the RMP, and impacts of the proposed actions. Of specific interest are potential effects on Contra Loma Reservoir water levels, recreational carrying capacity, fire and invasive species management, and ability to operate consistent with the purpose of Contra Loma Reservoir for water supply.
- Include, as part of the discussion, a short summary of applicable climate change studies, including their findings on potential environmental and water supply effects and their recommendations for addressing these effects.
- Describe any measures that would be undertaken to improve the adaptability and resilience of the proposed project to climate change.

Renewable Energy

Proposed improvements to the recreational facilities and the Community Park include two new lighted sports fields. Power would be provided by PG&E, which already provides electrical power to the Community Park, including the three lighted sports fields, and the Regional Park (p. 4-32). To help meet the increased demand for energy, Alternative 3 would include installation of solar panels on shade structures or buildings. Energy derived from these solar panels would be used to supplement the park's energy needs, including powering the water pumps at the swim lagoon.

Recommendations:

- Quantify, in the Final RMP/EIS, the increased energy demand for each action alternative as compared to the No Action Alternative.
- Consider, in the Final RMP/EIS, adopting a commitment to supply renewable energy necessary to meet 100% of the operational electricity needs for each action alternative.
- Discuss, in the Final RMP/EIS, opportunities to utilize renewable energy produced onsite, or through procurement from PG&E, to meet 100% of the current and future electricity needs of the Contra Loma Reservoir and Recreation Area.

Naturally Occurring Asbestos

Asbestos-bearing ultramafic rocks are found in at least 44 of California's 58 counties. Disturbance of rocks and soils that contain naturally occurring asbestos (NOA) can result in the release of asbestos fibers to the air and exposure to the public. Asbestos is a known human carcinogen and represents a potential human health risk for those exposed while using roads or trails where it occurs. For information on the occurrence of NOA and health impacts, see EPA's NOA webpage at: <http://www.epa.gov/asbestos/pubs/clean.html>. The Draft RMP/EIS does not indicate whether NOA has been identified in the study area. Nor does it evaluate potential risks to current and future visitors who may be exposed to NOA on existing and proposed trails and roads through recreational activities.

Recommendations:

- Determine whether or not NOA is present on trails or roads within the study area. Assess the potential for exposure to elevated levels of NOA from common activities such as hiking, mountain biking, camping, and patrols and road maintenance activities. Provide information in the Final RMP/EIS.
- If NOA is found to be present, review the California Air Resources Board regulations and guidance at <http://www.arb.ca.gov/toxics/asbestos/asbestos.htm>, which address California's Asbestos Airborne Toxic Control Measures for Surfacing Applications that apply to unpaved roads.
- Evaluate existing trails and roads for sediment production and drainage in areas where NOA is likely to be present.
- If appropriate, post signs informing visitors that NOA is present, what the risks are, and how visitors can avoid exposure.
- If appropriate, these measures should be incorporated into the Preferred Alternative in the Final RMP/EIS and committed to in the Record of Decision.

Biological Resources

The Draft RMP/EIS does not include an evaluation of potential impacts on habitat fragmentation or the disruption of wildlife corridors from increased recreational activity, an expanded trail system and associated infrastructure construction. EPA is concerned with potential impacts to biological resources from increased noise, human presence and activities, habitat fragmentation, and disruption of wildlife corridors.

Fourteen special-status wildlife species have the potential to occur in Contra Loma, including three federally-listed threatened, and one federally-listed endangered, species (Table 3-7). Development needed to accommodate the projected regional population growth would convert a substantial amount of vacant land to urban uses. Such development would remove a substantial amount of native and non-native vegetation, increasing habitat fragmentation. These actions could result in major adverse cumulative impacts on vegetation (p. 4-54).

Recommendations:

- Provide additional data and analysis, in the Final RMP/EIS, to support the statement that mitigation measures would protect special-status wildlife species and their habitats and reduce impacts from RMP activities to a no impact or minor impact level (p. 4-62). For example, summarize studies and data regarding the noise and human presence level of tolerance of typical wildlife species such as deer, coyote, eagles, other raptors, and the San Joaquin kit fox.
- Describe and evaluate the potential for habitat fragmentation and disruption of wildlife corridors from the proposed increased recreational use and infrastructure under each alternative.
- Include, in the Final RMP/EIS as part of Mitigation Measure Wildlife-1 and 2, a clear commitment to consult with US Fish and Wildlife Service on any site-specific environmental analyses when specific construction activities are proposed.

Use of Herbicides

Text on p. 4-50 states that pesticide management plans are subject to review and approval by Reclamation prior to implementation. Reconnaissance surveys identified 23 invasive and/or noxious non-native plant species occurring at Contra Loma.

Recommendations:

- Specify, in the Final RMP/EIS, herbicides that would be used in the study area.
- Provide information on human health impacts associated with exposure to the specific herbicides that would be used.
- Provide information on environmental impacts associated with specific herbicides that would be used, including impacts to non-target organisms, federally-listed species, ground water, surface water, and soils. For more information on potential effects a pesticide may have to a listed species, go to: www.epa.gov/espp/litstatus/effects/index.htm
- Commit to specific best practices for herbicide use to protect human health and the environment.
- Consider, and provide information regarding, alternatives to herbicides for controlling invasive species.

Mass Transportation

Both action alternatives described in the Draft RMP/EIS would result in increased visitation and an increase in the number of vehicles using park roads, parking areas and public roads to access Contra Loma (p. ES-11). Further, the City's population is expected to increase by 15 percent (15,900 people) between 2010 and 2025.

Recommendation:

- Consider promoting mass transportation to provide access to Contra Loma Recreation Area in the Final RMP/EIS. Electric or hybrid shuttles could be a valuable service for park visitors and reduce air pollution. If mass transportation is found to be infeasible, explain why.

Enforcement and Funding

The Draft RMP/EIS includes some procedures for monitoring and enforcement to help ensure that the RMP is followed. For example, under all alternatives, the local managing partner(s) would continue to support and complement CCWD's programs to prevent zebra and quagga mussel infestation to ensure water quality impacts from invasive species are minor (p. 4-41).

Recommendations:

- Commit, in the Final RMP/EIS, to allocating funding and providing detailed plans for on-going, project-specific monitoring of visitor use and environmental impacts.
- Commit to allocating funding and providing detailed plans to enforce park visitor rules defined in the RMP.